## INTERNATIONAL SEARCH REPORT

Interponal Application No
PCT/EP 03/14105

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B01J8/00 B01J B01J8/18 B01J8/24 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) B01J C04B C22B IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5 033 413 A (HYDROCARBON RESEARCH INC) 1-4,10,23 July 1991 (1991-07-23) 18-23 column 4, line 43 - line 51 column 5, line 50 - line 52 abstract; figures US 2 826 460 A (SMITH JOHN H ET AL) X 1,18-23 11 March 1958 (1958-03-11) column 2, line 35 - line 48 GB 951 245 A (GAS COUNCIL) Α 1,18-23 4 March 1964 (1964-03-04) page 2, line 2 - line 23; figures US 2 901 421 A (DREW ROBERT D ET AL) 25 August 1959 (1959-08-25) Α 1,18-23the whole document -/-χl Further documents are listed in the continuation of box C. IX I Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance Invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is clied to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 16 April 2004 23/04/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Lapeyrere, J Fax: (+31-70) 340-3016

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